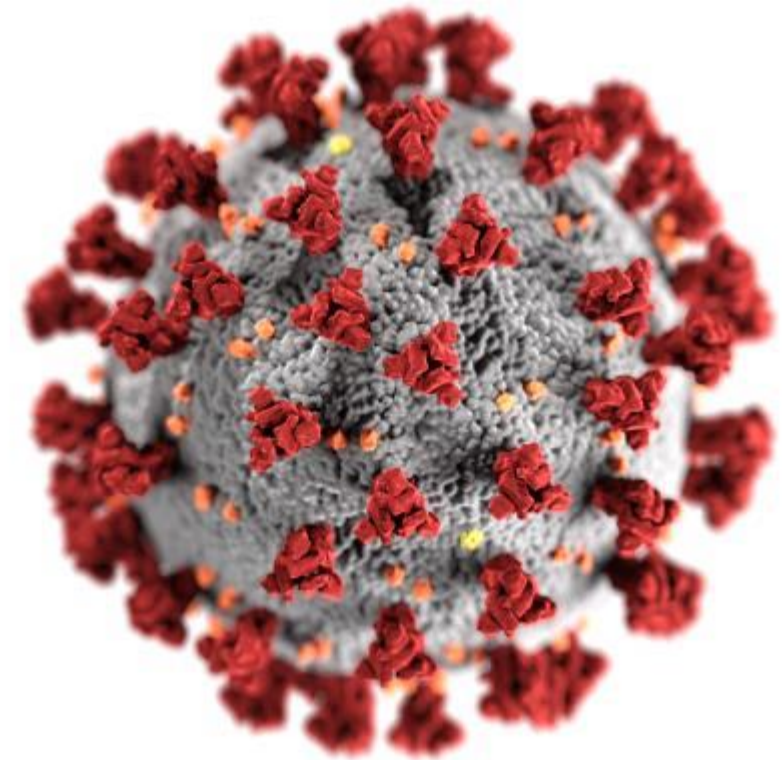


2019 Novel Coronavirus (COVID-19)

South Dakota Department of Health

March 5th, 2020



SOUTH DAKOTA DEPARTMENT OF HEALTH

This is an **emerging, rapidly evolving situation**. Information in this presentation is current as of March 4, 2020. Please check the South Dakota Department of Health website for the most current information and guidance.

<https://doh.sd.gov/news/Coronavirus.aspx>

Agenda

- Situation Update
- Laboratory Guidance
- Infection Prevention
- Supply Chain Management
- On-going Communications
- Q&A Session

Note: Slides and a recording of the presentations will be posted to the website following the webinar.

Emergence of Coronavirus

- Dec 31: Pneumonia of unexplained origin was first identified in Wuhan City, Hubei Province, China
 - Jan 7: World Health Organization (WHO) reported a novel coronavirus identified by China
 - Jan 30: WHO declares a Public Health Emergency
- COVID-19 – disease caused by the virus
- SARS-CoV-2 – the virus

Emergence of Coronavirus

- Emergence into U.S.
 - Jan 21: 1st US case confirmed (WA)
 - Jan 30: 6th US case confirmed; 1st person-to-person transmission (IL)
 - Jan 31: US Dept. of Health & Human Services declares a Public Health Emergency
 - Feb 26: 1st case of community spread in US (CA)
 - Feb 29: 1st US death (WA)
 - 1st Health care worker infection (WA)
 - 1st Long-term care facility outbreak (WA)



Coronavirus Situation – as of 03/04/2020

- [International](#) (76 countries)
 - 93,090 confirmed cases
 - 2,984 deaths
- [United States](#) (13 states)
 - 80 confirmed cases in U.S.
 - 16 likely person-to-person (40 under investigation)
 - 9 deaths
- [South Dakota](#)
 - 0 confirmed cases in South Dakota
 - 0 deaths



PUI Definition

800-592-1861

Priority Level	Clinical Features	Risk Exposure*
Low	Fever OR Cough OR Shortness of Breath	None identified
Medium	Fever OR Cough OR Shortness of Breath	Identified risk
High	Fever AND Cough OR Shortness of Breath	Identified risk

*Individual meets the risk exposure criterion if they have one of the following:

- Close contact to a laboratory-confirmed case within 14 days of symptom onset.
- History of travel to a geographic area with community transmission in a state within 14 days of symptom onset. Visit CDC website for the current list of states:
<https://www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html>
- History of travel from a country under a Level 2 or Level 3 Travel Advisory. Visit CDC website for the current list of countries: <https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html>

Disease Prevention Strategies

- Border containment
 - Traveler monitoring
- Community mitigation
 - Individual
 - Prevent exposure
 - Prevent spread
 - Community
 - Social distancing
 - Potential school closure
 - Consider event postponement or cancellation
 - Environmental
 - Regular cleaning high-touch surfaces and counters using normal cleaning products



“Don’t let the illness spread beyond you.” - Dr. Nancy Messonnier, CDC



SOUTH DAKOTA DEPARTMENT OF HEALTH

Laboratory Guidelines

- Required Materials
- Specimen Collection
- Packaging and Shipping
- Diagnostic Testing
- SARS-CoV-2 Results
- Archived Information



Laboratory Guidance: Required Materials

- Swabs:
 - **Acceptable:** Synthetic tip such as nylon or Dacron
 - **Acceptable:** Aluminum or plastic shaft
 - **Unacceptable:** Calcium alginate swabs
 - **Unacceptable:** Cotton swabs with wooden shafts
- Viral Transport Media (aka. VTM, UTM, M4):
 - Minimum of 2-3 ml required
- Sterile sputum cups
- Category B shipping supplies
- Collection kits are available from the SDPHL



Laboratory Guidance: Specimen Collection

- Required:
 - Nasopharyngeal (NP) swab in VTM:
 - Insert swab into the nostril parallel to the palate
 - Leave swab in place for a few seconds
 - Swab both nostrils with the same swab
 - Oropharyngeal (OP) swab in VTM:
 - Swab the posterior pharynx
 - Avoid the tongue
- Optional:
 - Sputum (if patient is producing)

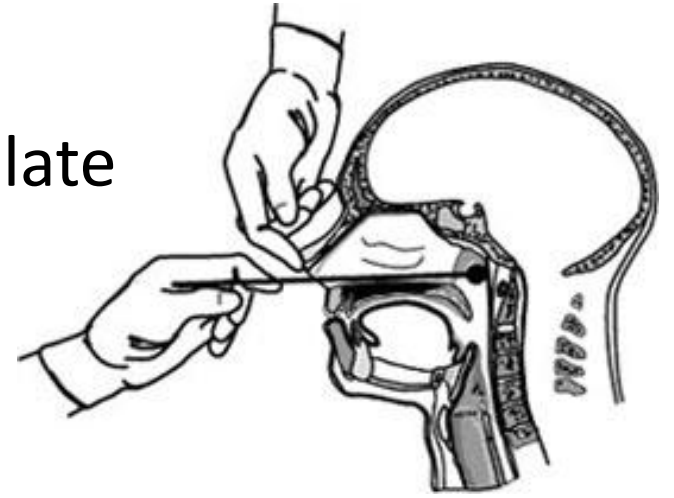



Image: Manual for the Surveillance of Vaccine-Preventable Diseases, 2015

Laboratory Guidance: Packaging/Shipping

- Specimens should be shipped to the SDPHL:
 - As a Category B, Biological Substance
 - On ice packs
 - With an accompanying [requisition](#)
- SDPHL courier service:
 - 877-434-9366

 South Dakota Public Health Laboratory 615 E. Fourth Street Pierre, SD 57501 Phone 605-773-3368 Fax 605-773-8201 https://doh.sd.gov/Lab/		Lab Use Only
Program Use Only <input type="checkbox"/> Public Health Investigation <input type="checkbox"/> CD Billing Code <input type="checkbox"/> Flu Surveillance <input type="checkbox"/> Outbreak		Facility _____ Address _____ City _____ Phone _____ Physician/Clinician Name _____
Patient Information: Patient ID Patient Name: (Last) _____ (First) _____ (MI) _____ _____		
Patient's Address _____ City _____ State _____ Zip Code _____		Date of Birth ____/____/____ Sex _____ Race/Ethnicity _____ Medication # _____
Patient Data Principal Symptoms _____ Diagnostic Code _____		Disease Suspected _____ Date of Onset _____ Fever (Over 100 F) _____ Rash? <input type="checkbox"/> Yes <input type="checkbox"/> No Immunization Data _____ Screening <input type="checkbox"/> Yes <input type="checkbox"/> No
Specimen Data: Collection Date: ____/____/____		
<input type="checkbox"/> Serum <input type="checkbox"/> Whole Blood (EDTA) Venous Capillary <input type="checkbox"/> Quantiferon TB Gold Plus <input type="checkbox"/> Blood Plasma		Specimen Source: <input type="checkbox"/> Blood <input type="checkbox"/> NP Aspirate <input type="checkbox"/> Sputum <input type="checkbox"/> Urine <input type="checkbox"/> Bronch Wash <input type="checkbox"/> NP Swab <input type="checkbox"/> Stool isolate <input type="checkbox"/> Vaginal <input type="checkbox"/> Cervical <input type="checkbox"/> Pleural <input type="checkbox"/> Stool preserved <input type="checkbox"/> Fluid <input type="checkbox"/> Eye <input type="checkbox"/> Racial <input type="checkbox"/> Throat <input type="checkbox"/> Tissue <input type="checkbox"/> N/A <input type="checkbox"/> Spinal fluid (CSF) <input type="checkbox"/> Urethral <input type="checkbox"/> Wound
SEROLOGY <input type="checkbox"/> SBR Brucella Ab <input type="checkbox"/> STU Francisella tularensis Ab <input type="checkbox"/> HPS Hantavirus IgG/IgM Ab <input type="checkbox"/> HAM Hepatitis A IgM Ab <input type="checkbox"/> HAV Hepatitis A IgG Ab <input type="checkbox"/> HAP Hepatitis A Acute Profile <input type="checkbox"/> HBD Hepatitis B Acute Profile <input type="checkbox"/> HBC Hepatitis B Chronic Profile <input type="checkbox"/> VHC Hepatitis B Core Total Ab <input type="checkbox"/> VCM Hepatitis B Core IgM Ab <input type="checkbox"/> VHG Hepatitis B Surface Ab <input type="checkbox"/> VSG Hepatitis B Post Vac. Screen <input type="checkbox"/> VSB Hepatitis B Surface Ag <input type="checkbox"/> HCV Hepatitis C Ab <input type="checkbox"/> VLGC Lyme IgG Ab <input type="checkbox"/> VLIM Lyme IgM Ab <input type="checkbox"/> VRO Measles IgG (Rubella) Ab <input type="checkbox"/> VIM Measles IgM (Rubella) Ab <input type="checkbox"/> VMS Mumps IgG Ab <input type="checkbox"/> VYM Mumps IgM Ab <input type="checkbox"/> VQS Q Fever IgG Ab <input type="checkbox"/> VRK Rickettsial Ab Panel <input type="checkbox"/> VSF Rocky Mt. Spotted Fever IgG Ab <input type="checkbox"/> VRE Rubella IgG Ab <input type="checkbox"/> VTY Typhus IgG Ab <input type="checkbox"/> WNM West Nile Virus IgM Ab <input type="checkbox"/> WNV West Nile Virus IgG Ab <input type="checkbox"/> VNZ Varicella Zoster IgG Ab <input type="checkbox"/> Referral _____		
VIROLOGY <input type="checkbox"/> IAB Influenza A/B PCR <input type="checkbox"/> GIP Gastrointestinal Panel <input type="checkbox"/> RPP Respiratory Pathogen Profile <input type="checkbox"/> PCR Measles PCR <input type="checkbox"/> MPCR Mumps PCR <input type="checkbox"/> DEN Dengue IgM Ab <input type="checkbox"/> ZikaM Zika IgM Ab <input type="checkbox"/> ZikaS Zika PCR Serology <input type="checkbox"/> VOI OTHER _____ BLOOD LEAD <input type="checkbox"/> BLT Blood Lead MYCOBACTERIOLOGY <input type="checkbox"/> TTB Mycobacterium Culture and Smear <input type="checkbox"/> TOT Mycobacterium Reference ID <input type="checkbox"/> MTB M. tuberculosis PCR <input type="checkbox"/> QFT Quantiferon TB Gold Plus STD <input type="checkbox"/> GFB Chlamydia Gonorrhea <input type="checkbox"/> HIV HIV <input type="checkbox"/> RPR Syphilis Non-treponemal Ab <input type="checkbox"/> TPFA Syphilis Treponemal Ab PARASITOLOGY <input type="checkbox"/> JOP Ova & Parasite Exam <input type="checkbox"/> BCP Cryptosporidium <input type="checkbox"/> BCS Cyclospora		
SPECIAL PATHOGENS <input type="checkbox"/> Please contact the laboratory at 605-773-3368 before sending. BACTERIOLOGY <input type="checkbox"/> BMD Bacterial Misc. Culture ID <input type="checkbox"/> BPR B. pertussis PCR <input type="checkbox"/> BPC B. pertussis culture <input type="checkbox"/> CAM Campylobacter ID <input type="checkbox"/> BSD Corynebacterium diphtheriae <input type="checkbox"/> BEE E. coli O157 confirmation <input type="checkbox"/> HPLC Haemophilus influenzae typing <input type="checkbox"/> ACIM CRE Screen <input type="checkbox"/> BGR Neisseria gonorrhoeae culture <input type="checkbox"/> NMEN Neisseria meningitidis serotyping <input type="checkbox"/> SAL Salmonella serotyping <input type="checkbox"/> SHIG Shigella serotyping <input type="checkbox"/> STX Shigatoxin EIA <input type="checkbox"/> BEP Enteric Stool Culture <input type="checkbox"/> BVC Vibrio culture ID <input type="checkbox"/> BYC Yersinia culture ID <input type="checkbox"/> BMI Yeast/Fungus ID <input type="checkbox"/> OTHER _____		

Laboratory Guidance: Diagnostic Testing

- COVID-19 PUIs must be tested for:
 - Common respiratory pathogens (e.g. Influenza, RSV)
 - SARS-CoV-2
- Testing offered by SDPHL:
 - Respiratory Pathogens Panel (multiplex PCR)
 - SARS-CoV-2 (CDC RT-PCR)
 - These tests will be offered at no charge
 - Duplicate specimens are required if SDPHL is asked to perform respiratory pathogen testing and SARS-CoV-2 testing



Laboratory Guidance: SARS-CoV-2 Results

- Results for SARS-CoV-2 testing performed by SDPHL:
 - “Presumptive Positive”
 - “Not Detected”
 - “Inconclusive”
 - “Invalid”
- Results will be called to submitting laboratory
- Official report will be faxed to submitting laboratory



Laboratory Guidance: Archived Information

The screenshot shows the website of the South Dakota Department of Health, specifically the Laboratory section. The header includes the department's name, the Secretary's name (Kim Malsam-Rysdon), and social media links. A navigation bar lists various topics, with 'RESOURCES & PUBLICATIONS' highlighted. The main content area is titled 'MEDICAL MICROBIOLOGY' and features a sidebar with a 'Collapse All | Expand All' button and a list of categories: Environmental, Forensic, Medical-Microbiology (selected), Courier, Rabies, Resources, and Links. The 'Medical-Microbiology' section lists various resources and publications, including a '2019 Packaging and Shipping Registration' and 'Updated Guidance for Novel Coronavirus (2019-nCoV)'. A footer note provides contact information for Dr. Tim Southern, Laboratory Director.

WEBSITE OF THE STATE OF SOUTH DAKOTA DEPARTMENT OF HEALTH
Kim Malsam-Rysdon, Secretary of Health

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A-Z TOPICS NEWS LOCAL OFFICES LICENSING BOARDS EVENT CALENDAR RESOURCES & PUBLICATIONS FAQs

HOME ► STATE PUBLIC HEALTH LABORATORY ► MEDICAL-MICROBIOLOGY

STATE PUBLIC HEALTH LABORATORY

Collapse All | Expand All

+ Environmental

Forensic

Medical-Microbiology

Courier

Rabies

+ Resources

Links

MEDICAL MICROBIOLOGY

- Bacteriology / Mycology / Parasitology
- Mycobacteriology
- Blood Lead
- Serology
- Virology
- Special Pathogens

RESOURCES

- 2019 Packaging and Shipping Registration
- Medical Testing Procedure Manual
- Laboratory Test Menu
- Laboratory Specimen Requisition Form
- Influenza Sample Submission Form
- Submit Human Specimens for West Nile Virus
- Submit Animal Specimens for Rabies Testing
- Order Medical Shipping Supplies
- CLIA Certificate
- Test Quick Reference
- Zika-Dengue Fact Sheet

PUBLICATIONS

Archived Lab Alerts

- Novel Coronavirus Testing Offered at the South Dakota Public Health Lab - Feb. 28, 2020
- Updated Guidance for 2019 Coronavirus Disease (COVID-19) - Feb. 18, 2020
- Updated Guidance for Novel Coronavirus (2019-nCoV) - Jan. 24, 2020
- Changes to Chlamydia and Gonorrhea Testing
- Revised Medical Microbiology Fee Schedule
- New Method for Norovirus Detection
- Changes to Viral Serologic Testing
- Viral Cultures to be Discontinued
- Implementation of Viral Molecular Panels
- Virology Program Letter

For More Information Contact Dr. Tim Southern, Laboratory Director

RESOURCES

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<https://doh.sd.gov/lab/medical-microbiology/>

Infection Prevention



SOUTH DAKOTA DEPARTMENT OF HEALTH

Infection Prevention

Isolation Requirements:
Standard,
Contact, &
Airborne Precautions,
Including the Use of Eye
Protection



Interim Infection Prevention and Control Recommendations for Patients with Confirmed Coronavirus Disease 2019 (COVID-19)

1. Minimize Chance for Exposures

- Before Arrival
- Upon Arrival and During the Visit

2. Adherence to Standard, Contact, and Airborne Precautions, Including the Use of Eye Protection

- Patient Placement
- Hand Hygiene
- Personal Protective Equipment
 - Gloves
 - Gowns
 - Respiratory Protection
 - Eye Protection

– Use Caution When Performing Aerosol-Generating Procedures

– Diagnostic Respiratory Specimen Collection

– Duration of Isolation Precautions for PUIs and confirmed COVID-19 patients

[Interim Infection Prevention and Control Recommendations for Patients with Confirmed Coronavirus Disease 2019 \(COVID-19\)](#)

Continued...

3. Manage Visitor Access and Movement Within the Facility
4. Implement Engineering Controls
5. Monitor and Manage Ill and Exposed Healthcare Personnel
6. Train and Educate Healthcare Personnel
7. Implement Environmental Infection Control
8. Establish Reporting within Healthcare Facilities and to Public Health Authorities

Appendix: Additional Information about Respirators and Facemasks

Guidance for Specific Settings & Scenarios

- [Strategies to Prevent the Spread of COVID-19 in Long-Term Care Facilities \(LTCF\)](#)
- [The Society for Post-Acute and Long-Term Care Medicine - COVID-19 in PALTC settings](#)
- [CDC/NIOSH - Expedient Methods for Surge Airborne Isolation within Healthcare Settings during Response to a Natural or Manmade Epidemic](#)



Environmental Cleaning and Disinfection

- Routine cleaning and disinfection procedures are appropriate for SARS-CoV-2 in healthcare settings, including those patient-care areas in which aerosol-generating procedures are performed. Products with [EPA-approved](#) emerging viral pathogens claims are recommended for use against SARS-CoV-2. **Management of laundry, food service utensils, and medical waste should also be performed in accordance with routine procedures.**
- Coronaviruses are enveloped viruses, meaning they are one of the easiest to kill with the appropriate disinfectant product. ([EPA Link](#))

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/caring-for-patients.html>



SOUTH DAKOTA DEPARTMENT OF HEALTH

Strategies to Optimize Supply

- Strategies for Optimizing the Supply of N95 Respirators
 - [Conventional Capacity Strategies](#)
 - [Contingency Capacity Strategies](#)
 - [Crisis/Alternate Strategies](#)



PPE Use & Notes from Response Hospitals

Rough usage estimates from hospitals caring for COVID-19 patients

- 6 sets of PPE Per Shift when patient feeling relatively well
- 20 sets per shift when patient was more symptomatic

Initial Response ➡ “Right sized” Response



Supply Chain Management

Supply Chain Management: CDC Guidance

- [Checklist for Healthcare Facilities: Strategies for Optimizing the Supply of N95 Respirators during the COVID-19 Response](#)
 - CDC guidance previously sent out – Last reviewed Mar 2
- [Release of Stockpiled N95 Filtering Facepiece Respirators Beyond the Manufacturer-Designated Shelf Life: Considerations for the COVID-19 Response](#)
 - CDC guidance previously sent out – Updated Feb 28



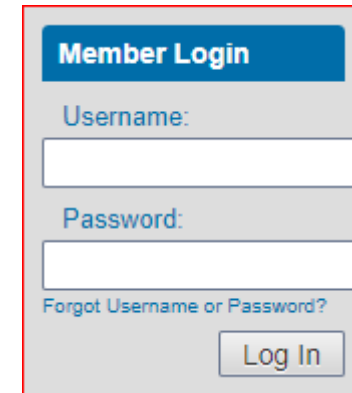
Supply Chain Management: SD Preparations

- South Dakota Health Care Preparedness Coalition caches
 - 4 Chapters in SD
- South Dakota DOH PPE / Medical caches
 - Central cache
 - Forward deployed caches
- South Dakota Medical Shelter Trailers
 - 10 locations across the state
- Federal Mobile Medical Station
 - 250 bed

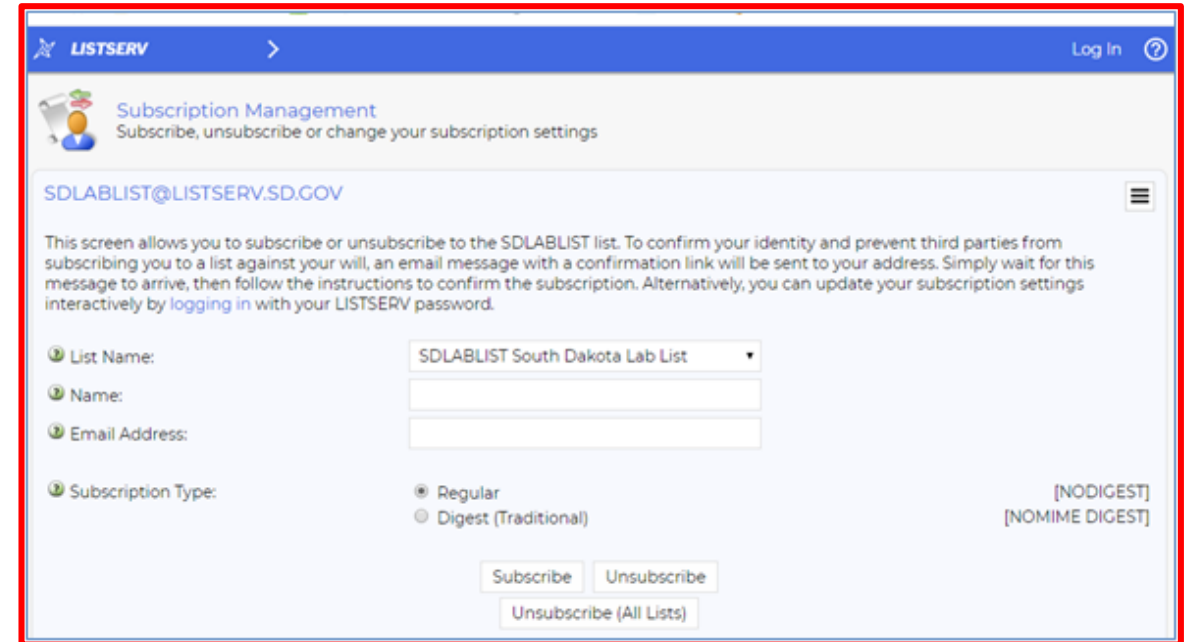
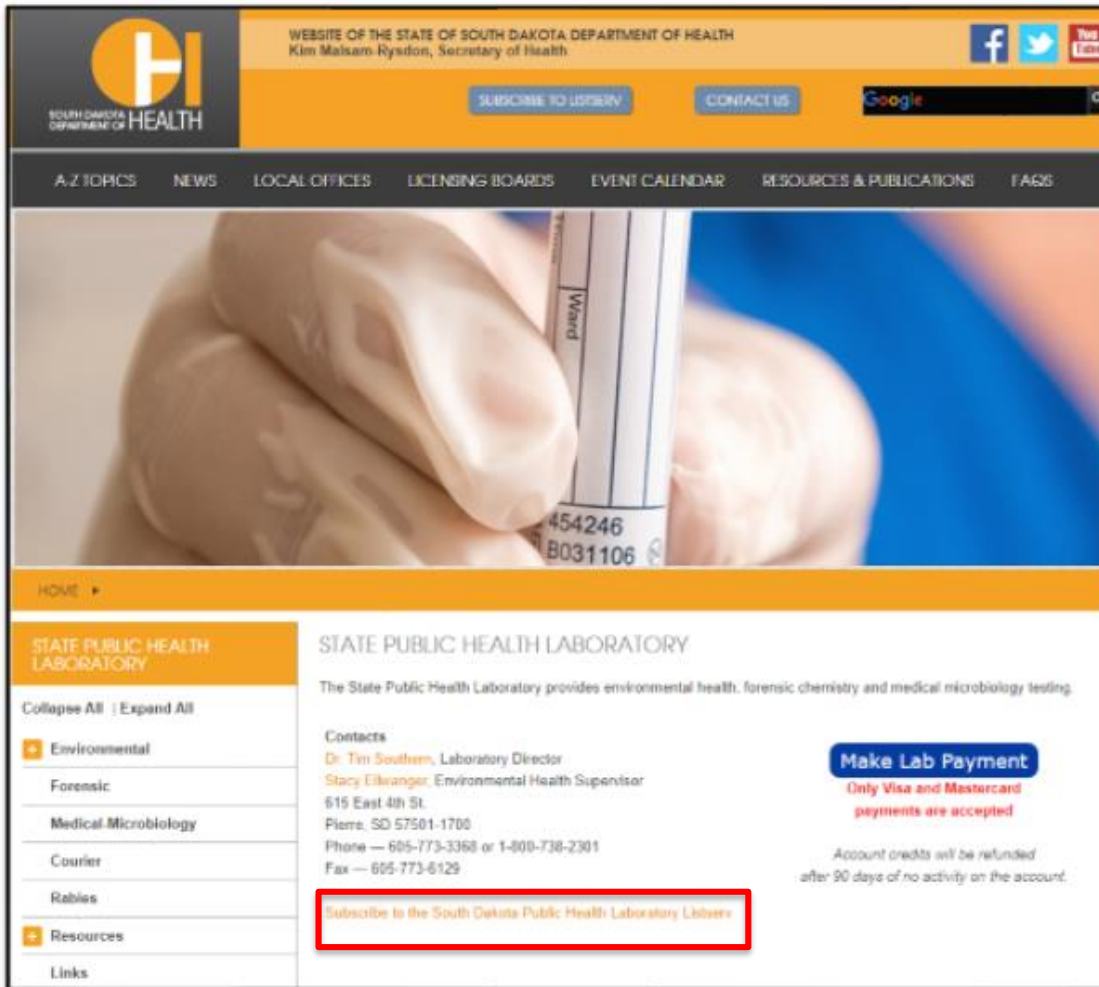
Note: We will host a teleconference series focused on supply chain management starting next week. Invitations will go out to Healthcare Coalitions.

On-Going Communications

- SD Health Alert Network: <https://sdhan.sd.gov>
- Please log in and be sure your contact information is up-to-date. Click on [Forgot Username or Password?](#) for assistance.
- New accounts: Please click on the [Register](#) button and complete the form. If you unsure of your organization, please select “Other” and you will be placed in the proper organization and role when accepted.

A screenshot of a 'Member Login' form. It features a blue header with the text 'Member Login'. Below the header, there are two input fields: 'Username:' and 'Password:'. To the right of the 'Password:' field is a link that says 'Forgot Username or Password?'. At the bottom right of the form is a 'Log In' button.

Public Health Laboratory Listserv



[Subscribe](#)

****SDDOH will host a weekly teleconference for laboratory and infection prevention professionals. Invitation for this teleconference series will be distributed using the SD Laboratory and HAI listservs the week of March 9.**

SD HAI Listserv

[Subscribe](https://doh.sd.gov/diseases/hai/)



The screenshot shows the South Dakota Department of Health website. The header includes the department's logo, name, and website information. A navigation bar lists various topics, and a breadcrumb trail shows the path to the HAI page. The main content area is titled 'HEALTHCARE ASSOCIATED INFECTIONS' and includes a paragraph about the national goal of preventing HAIs. A sidebar on the left lists 'DISEASES & CONDITIONS' with 'Healthcare-Associated Infections' selected. A 'Subscribe to South Dakota's HAI ListServ' link is prominently displayed. A 'CLEAN HANDS COUNT' graphic is also visible.

WEBSITE OF THE STATE OF SOUTH DAKOTA DEPARTMENT OF HEALTH
Kim Malsam-Rysdon, Secretary of Health

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[A-Z TOPICS](#) [NEWS](#) [LOCAL OFFICES](#) [LICENSING BOARDS](#) [EVENT CALENDAR](#) [RESOURCES & PUBLICATIONS](#) [FAQS](#)

[HOME](#) ► [DISEASES & CONDITIONS](#) ► [HEALTHCARE-ASSOCIATED INFECTIONS](#)

DISEASES & CONDITIONS

[Collapse All](#) | [Expand All](#)

- [Healthcare-Associated Infections](#)
 - [Antibiotic Resistance and Stewardship](#)

HEALTHCARE ASSOCIATED INFECTIONS

The national goal is to prevent, reduce, and ultimately eliminate healthcare-associated infections (HAIs). South Dakota is actively engaged, with support from the Centers for Disease Control and Prevention, in working to address the issue of HAI prevention.

[Subscribe to South Dakota's HAI ListServ](#)

CLEAN HANDS COUNT
www.cdc.gov/HandHygiene

<https://doh.sd.gov/diseases/hai/>

SD Epi Listserv



The screenshot shows the top portion of the South Dakota Department of Health website. The header is orange and contains the department's logo on the left, which includes a stylized 'H' inside a circle and the text 'SOUTH DAKOTA DEPARTMENT OF HEALTH'. To the right of the logo, it says 'WEBSITE OF THE STATE OF SOUTH DAKOTA DEPARTMENT OF HEALTH' and 'Kim Malsam-Rysdon, Secretary of Health'. Further right are social media icons for Facebook, Twitter, and YouTube. Below these are two buttons: 'SUBSCRIBE TO LISTSERV' and 'CONTACT US'. A Google search bar is also present. A dark grey navigation bar follows, with links for 'A-Z TOPICS', 'NEWS', 'LOCAL OFFICES', 'LICENSING BOARDS', 'EVENT CALENDAR', 'RESOURCES & PUBLICATIONS', and 'FAQS'. The main banner has a dark purple background with a large, detailed illustration of a coronavirus particle on the right. On the left, the text reads '2019 Novel Coronavirus (COVID-19) Updates & Information'. At the bottom of the banner, there is a dark grey bar with the text '2019 NOVEL CORONAVIRUS' and a 'LEARN MORE' button.

SOUTH DAKOTA DEPARTMENT OF HEALTH

WEBSITE OF THE STATE OF SOUTH DAKOTA DEPARTMENT OF HEALTH
Kim Malsam-Rysdon, Secretary of Health

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2019 Novel Coronavirus (COVID-19)
Updates & Information

2019 NOVEL CORONAVIRUS LEARN MORE

[Subscribe](#)

<https://doh.sd.gov/>

Questions?

Follow-up after the webinar

General: 800-592-1861

Epidemiology: 605-773-3737

Laboratory: 605-773-3368

Live starting Monday (Mar 9)

COVIDSD@state.sd.us



SOUTH DAKOTA DEPARTMENT OF HEALTH